IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

John J. Hefti

Application No.: 10/064,392

Filed: July, 9, 2002

For: Diffusion-Based System and Method For Detecting and Monitoring Activity of Biologic and Chemical Activity

Examiner: ~~To Be Assigned~~

Art Unit: ~~To Be Assigned~~

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Before examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please replace paragraph [0052] with the following paragraph:

[0052] The electronic embodiments of these structures are capable of addressing and conveying signals to very small spatial regions, as well as to create topologically complex circuits of very high density. Application of micro-fabrication techniques has enabled the capture and management of very small fluid samples in microfluidic structures, in which both dissolved and non-dissolved biologic and chemical constituents may be manipulated. In such an environment, diffusion of the biochemical species can be detected, simulated, modeled, controlled, and monitored in a highly reproducible way. The transport of constituents in these